NEW ENGLAND FARMER.

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ORIGINAL COMMUNICATIONS.

FOR THE NEW ENGLAND FARMER.

LARGE TREES.

At the road side, near the centre of the village, in Wallingford, Rutland County, Vt. stands an *Apple tree*, whose circumference is *eight feet four inches* at the height of one foot from the ground.

A BUTTERNUT TREE,

Known generally in the United States, as the *white walnut*, is standing about fifty yards from the apple tree, noticed in the above paragraph, which measures nine feet two inches, at the height of eighteen inches from the ground, which is immediately above the bulge made by the junction of the roots with the trunk; the branches of this tree extend over a *tract of land* five rods in diameter.

Are there larger trees of the same species in the United States?

Truly yours, JOHN IVES.

Wallingford, Vt. May 19, 1830.

FOR THE NEW ENGLAND FARMER.

A SKETCH OF VEGETABLE ANATOMY, VEGETABLE ECONOMY, &c.

[*Continued from page* 345.]

FRUCTIFICATION OF PLANTS.

Under the term *fructification* are comprehended, not only all the parts of the fruit, but also those of the flower, which are necessary for perfecting the former. A plant may be deficient in some organs, but cannot be totally destitute of those by which its species are continued from age to age; for propagation by cuttings, buds, or roots, is only the extension of an individual, the life and vigor of which may, in process of time, gradually wear out and the species become extinct, unless it be reproduced from seed.

The parts of a flower, the necessary organs to bring about the great purpose of nature, are

I. Calyx. The flower cup or external covering, enclosing the whole. Its use is to defend and support the flower. There are several kinds, but the following are the principal.

1. *Perianthium*, perianth, a true calyx—is contiguous to, and makes part of the flower, as the five beautiful green leaves which surround and support a rose, including their urn-shaped base. The form is different in different species; tubular in pinks; imbricated and spinous, as in the thistle, &c. 2. *Involucrum*, involucre; this is remote from the flower, as in the umbelliferous tribe; but it may be a question whether, in this case, it be a calyx, but rather a bractea. 3. *Amentum*, ament, a catkin, formed of numerous scales attached to one cylindrial receptacle, as in the oak, walnut, chesnut, &c. In catkins which bear seed, the scales are often enlarged and hardened into a cone, as in the fir.

4. *Spatha*, spathe, a sheath, bursts longitudinally, and is more or less remote from the flower, as in the narcissus, iris, &c. 5. *Gluma*, glume, a husk; the chafy calyx of grasses and their allies. To it belongs the awn, the beard, which, however, is not constant in the same species.

II. *Corolla.* The delicate and generally colored leaves or petals of a flower, always situated within the calyx when both are present. A corolla, which consists of one petal, (petalum) as in foxglove, is termed *monopetalous*, and is various as to form, as *campanulate*, bell shaped; *funnel shaped*, tubular at the bottom, gradually expanding; *salver shaped*, horizontal border placed on a tube; *wheel shaped*, border flat—little or no tube; *ringent*, like the mouth of an animal gaping; *personate*, mouth closed by a palate, as in the antirrhinum. Its parts are the *tube* and the *limb*, the border. A corolla which consists of several petals, is called *polypetalous*, and is either *cruciform*, cross shaped, as in the radish; *rosaceous*, five petals like a rose; *liliaceous*, six petals, like a lily; *papilionaceous*, irregular and spreading, as in the pea family; or *incomplete*, when some parts, found in analogous flowers, are wanting. The parts of a polypetalous corolla are the *claw*, the part attached to the receptacle, and the *border*.

Neither the calyx, nor the corolla is indispensibly necessary to the flower, for one or the other is wanting in many plants. The calyx is generally green, and of a thick texture, but sometimes it is beautifully colored; and there is some doubt whether the splendid leaves of tulips and lilies be not a true calyx. The corolla answers some valuable purpose, and when the more essential parts wither that withers also.

The term corolla comprehends not only the petal or petals, but also the nectary, (nectarium) which is variously situated in different flowers, being frequently a part of, or an appendage to it. Sometimes the petal itself secretes honey and contains it in a groove or small cavity near its base; sometimes a set of glands performs this office, as in cruciform plants, whose glands are placed near the base of the stamens; and in some cases there is a peculiar petal like organ for secreting and holding the nectareous juice, as in the columbine, &c. The plants whose nectary is distinct from the petals are commonly poisonous, as in Cupid's car, *aconitum*. The use of the honey, probably aided by the fragrance of the flower, is to attract insects, which serve to scatter the fertilizing dust, *farina*, on the part for which it was designed.

3. *Stamina*, stamens, situated within the corolla, various in number in different flowers, from one to several hundred. A stamen usually consists of the filament, *filamentum*, and the anther, *arthera*, the former, rarely wanting, elevates the latter, which is the essential part, being indispensably necessary. The anther is generally oblong, having two cells, which burst longitudinally, on the outside, at a proper time. The situation of the anthers upon their filaments is generally perpendicular or incumbent. Some are suspended from their filaments by a thread, capable of being turned round several times without coming off, as in the lily. The cells of the anther contain the fertilizing dust, farina, which under the microscope is found to have a peculiar structure in different plants. This dust is discharged chiefly in dry sunny weather, when the coats of the anther by bursting scatter it about, assisted by numerous insects which frequent the flower in search of honey. Each grain of farina remains entire as long as it continues dry, being a membranous bag, so constituted as to burst when it meets with moisture, discharging a fertilizing elastic vapor, which is the effective part. In a few cases the fertilizing matter puts on a different appearance, and is glutinous. The stamens are subject, in certain cases, to be obliterated, as in the snowball. They are metamorphosed into petals, in what are called double flowers, as in the pæony. Double flowers, however beautiful and much to be admired, are, nevertheless, imperfect, and unfit for botanical illustration.

4. *Pistilla*, pistils or pointals, various in number in different flowers, from one to hundreds; standing in the centre, within the circle formed by the stamens, when they are both in the same flower, which is commonly the case. Sometimes they are placed in a different individual of the same species, in which case they are called *separate* flowers. That furnished with stamens is termed the *male* flower; that with pointals, the *female*. Such as have both organs in the same individual are called united or *perfect* flowers. A flower furnished with both calyx and corolla is said to be *complete*, when the corolla is wanting, *incomplete*; and when the corolla is present without the calyx, *naked*. When male and female flowers are borne by one individual plant, as the melon, such are named *monœcious*; but if they grow from two separate plants, as in hemp, they are *diœcious*. Each pointal consists of three parts; the *germen*, or rudiments of future fruit or seed, and of course essential; the *style*, which is often wanting; when present it stands on the germen and elevates the stigma; and the stigma, which is various in form, as roundish, lobed, pointed, &c. and is necessarily always present, being destined to receive the *farina*, and is furnished with its own appropriate moisture to cause that substance to explode. The fertilizing vapor being absorbed by the stigma, is carried to the germen, and by these means the seeds are rendered fertile. This will account for the hybrids, mixture or 'intermarriage' of different plants of the same species. Indian corn, for instance. The farina furnished by the stamens in the spike, on the top of the stalk, is frequently carried by the wind to a field of corn, at some distance of a different variety, and coming in contact with the pointals, or what is called the silk of the ear, a new variety is produced.

In general the stigma remains vigorous no longer than until the farina has had access to it. If the germen be above the calyx and corolla, as in the strawberry, it is termed *superior*; if below them as in the apple, it is *inferior*. Pointals as well as stamens are occasionally obliterated, or changed to petals, as in double flowers.

5. *Pericarpium*, pericarp, or seed vessel, which is formed of the germen enlarged. It is not essential, for many plants have naked seeds guarded only by the permanent parts of the flower, as in the calyx. Some which remain closed while moist, split open when dry. There are several kinds, as, 1. *Capsula*, capsule, a dry, woody or membranous substance with one or more cells, opening by valves (pieces into which it splits) or pores, as in the poppy. 2. *Siliqua*, a pod, a long, dry, solitary seed vessel of two valves, divided

into two cells by a longitudinal partition, along each of whose edges the seeds are ranged, as in the cabbage. *Silicula*, is a roundish pod, as in honesty. 3. *Legumen*, legume, a long solitary pod of two oblong valves, without a longitudinal partition; seeds arranged along one of its margins only, as in the pea and bean. 4. *Drupa*, stone fruit, fleshy, undivided coat, containing a stone or nut, as in the peach, &c. 5. *Pomum*, pome, contains a capsule, of several cells in a fleshy coat, as the apple, pear, &c. 6. *Becca*, a berry, fleshy without valves containing one or more seeds lodged in pulp, as in the currant, gooseberry, &c. Some berries are compound, as the raspberry, consisting of a number of small ones, each containing a seed. In the melon family the cells and seeds are placed some distance from the centre. 7. *Strobilus*, a cone, originates from a catkin, becomes hardened and enlarged into a compound seed vessel, as in the pine, &c.

6. *Semina*, seeds. The most essential part, all others being subservient to this. Seeds are composed of several parts, the most important of which is the *embryo* or *corculum*, a little heart readily observed in the bean. It generally lodges within the substance of the seed. The embryo or corcule consists of the *radicle*, the descending part, which becomes the root; and the *plume*, the ascending part, which becomes the stem, &c. The *cotyledons*, the seed lobes, generally two in number, are connected with the embryo, and when the seed has sent the root sufficiently into the earth, these organs generally rise above the surface and perform the office of leaves until proper foliage be produced. Plants for the most part are properly called *dycotyledonous*, having two cotyledons. Those called *monocotyledonous*, as wheat, Indian corn, &c, have really no proper cotyledon, and the first thing which appears above the surface from their seed is a real leaf. The *albumen*, or white, makes up the greatest part of some seeds, but never rises out of the ground, nor assumes the office of leaves, being destined to nourish the embryo until its roots can perform their office. The *vitellus*, a white substance, conspicuous in Indian corn, answers the same purpose. The nutritious matter, which in these plants constitutes the albumen, is in others lodged in the cotyledons. The skin is either a single or double membrane, which bursts irregularly when the contents swell in germination. *Hilum*, the scar, is the point of attachment through which nourishment is conveyed to the seed while growing. This point is considered the base of the seed.

The seeds are often accompanied with light appendages. Some are covered with a delicate fine membrane. Many of their appendages are very light, feathery and downy and serve to waft the seed along the air. To these may be added several spines, hooks, scales and crests, which serve to attach such seeds as are furnished with them to the rough coats of animals, and so promote their dispersion. Every seed, however small, is an organized body, which contains under its membranes a plant in miniature.

Seeds do not germinate equally well in all places and seasons. They require moisture and a certain degree of heat peculiar to the species before they begin that process. Air is necessary, but light is supposed to be injurious to germination. Seeds frequently preserve their germinating virtues for many years when buried deep in the earth and being deprived of air. It is frequently the case, that on digging up a piece of land, to observe it soon after covered with several species of plants, which had not been seen there in the memory of man. The seeds being brought near the surface at a proper time, germination commenced.

7. *Receptaculum*, the receptacle is the common base or point of connexion of the parts of fructification. It is essential as it must exist in some shape or other. This part, however, comes chiefly into notice when it assumes any peculiar form, as in compound flowers—the daisy, dandelion, and thistle. It is either *proper*, as when it belongs to a simple flower, as in the rose; or *common*, as when it belongs to aggregate flowers, which consist of several fructifications or smaller flowers growing upon one common receptacle, or enclosed by one common calyx. Aggregate flowers comprehend several kinds, as compound flowers, amentaceous, umbellate, cymore, &c. A compound flower consists of several smaller flowers, called florets, standing together upon one common receptacle and inclosed by one common calyx; each floret consisting of one petal, five stamens whose filaments are distinct at the bottom, but united by their anthers into a cylindrical tube, through which passes the pointal, and terminates in two curved points. The florets (which are either *ligulate*, having a longish or strap-shaped corolla, tubular at the base; or *tubular*, the corolla divided at the top into five segments) and the pointal stand on the germen or embryo seed, which elongates as it becomes mature. Some florets have both stamens and pointals and are denominated perfect; some have the former only and are called *staminiferous*; some have only the latter, and are termed *pistilliferous*, or fertile; and some are desitute of either, or have none that are effectual and are called *neuter*. In some instances each floret has its own appropriate calyx, besides the one in common. Compound flowers are either, *compound radiate*, the desk or centre composed of tubular, and the ray or circumference of ligulate florets, as in the sun flower; *ligulate*, consisting wholly of ligulate florets, as in the dandelion; or *discoid*, having only tubular florets, as in the thistle.

The receptacle is different in form, as concave, convex, flat, pyramidal, or globular; and is smooth, rough, scaly, hairy or cellular. The receptacle of the seed is that part to which they are attached in the seed vessel.

[*To be concluded next week.*]

Extract from a Report to Congress on American Canvas, Cables, and Cordage.

From this report the following facts are gathered:—

1st. That hemp may be cultivated in the United States to any extent which our necessities may require.

2nd. That in the present mode of cultivation, these are some errors which may readily be corrected when more attention is paid to it.

'3d. That, in its natural state, it is, in all important qualities, equal to that which we are in the habit of importing.

'4th. That it is injured in the mode of rotting and preparing it for manufacture.

'5th. That if sown thicker on the ground, water-rotted, and prepared with care, it will be, for all purposes, equal to any other.

'6th. That canvas, cables, and cordage, manufactured out of it, as now cultivated, are inferior in color, strength, and durability, to those manufactured from imported hemp, and consequently are not as *safe* or proper for use in the navy. And that this is the reason, and the only reason, "why canvas, cables, and cordage, made of hemp, the growth of the United States, may not be used in the equipment of national vessels, with equal advantage as if of foreign fabric or materials."'

From the Letter of Commodore Rogers we extract the following:

'The Commissioners beg leave to premise, that, the canvas manufactured in the United States, is made generally of *flax*. They believe that hemp has not been used for that purpose in any of the large factories: though it has been suggested, that, if hemp were sowed unusually thick, and pulled at a period to produce a fibre or hurl, on a medium between the ordinary hemp and flax, that is stouter and stronger than the latter, yet not so coarse and rough as the former, it might be found to be an advantageous substitute in the manufacture of canvas.

'With regard to flax in the manufacture of canvas, there can be no doubt that the American plant, if water-rotted and properly dressed, will make a cloth which may be used in the equipment of our national vessels, with equal advantage as if of foreign fabric or materials. We have purchased a considerable quantity of canvas made in the United States, of flax grown at Fairfield, Connecticut, where they are "in the habit of water-rotting it;" and its quality is not only considered sufficiently good for the service, but equal to that of the best imported canvas. We have also purchased canvas made from foreign and dew-rotted, American flax mixed, and it has passed inspection, though not equal to that made from the Fairfield flax.'

'The manufacturers of canvas object to dew rotted flax on various grounds. They prefer Dutch at 15 or Irish at 14 cents per lb. to this kind of flax at 9 cents per pound: because while one hundred pounds of Dutch will yield 72 lbs. and 100 lbs. of Irish will yield 69 lbs. the like quantity of American dew rotted, will yield only 40 pounds of clear flax.

'No reason can be discerned why the American flax should yield so much less than the Dutch, unless it is to be found in the defective process of rotting, dressing, and preparing it for market. The American plant, in its natural state contains, it is believed, as great a portion of fibre or lint as either of the others. A respectable manufacturer has stated, that he has long used the Fairfield flax, and that he considers it "more flexible, less woody, and stronger than that grown at the South, and preferable to Russia flax."

'The practice of pulling the plant in a green state, is defended on the grounds that, the younger the plant, the finer the tissue: yet, it is stated as an unquestionable fact, that the flax intended for the *finest purposes*, is not pulled, in the Netherlands, until the seeds are ripe. An intelligent French gentleman, in a letter to Mr Besnard, (an extract of which will be found among the papers accompanying this report) assigns reasons, which appear conclusive in favor of the practice which prevails in Holland, both as to the period when flax is pulled, and their peculiar method of steeping it.'

The 'high price of American flax, its unequal quality, and the uncertainty of supply,' are urged as among the reasons which have induced some of

the manufacturers of canvas, after repeated trials to recommence the importation of Irish flax; while others observe, that they have imported none since the fall of 1821, being unable to obtain a sufficient supply of American flax.

It appears to be the universal opinion of experienced men, that the process of dew-rotting flax diminishes its value and its weight, injures its color, and impairs its quality and strength. The experiments stated in the paper C, annexed, tend to confirm this opinion.

With regard to 'cables and cordage made of hemp, the growth of the United States,' many of the observations previously made, with respect to flax, are, in a great degree, applicable to hemp. In its natural state, American is believed to be equal to the best Russia; but the almost universal custom of dew rotting it, is so deleterious in its effects upon the fibre, as to present insuperable objections to its use in the Navy. This process not only weakens the fibre, but prevents the tar from incorporating with the yarns, thus rendering it seriously objectionable, particularly for cables. The manufacturers of cordage further object to it, because 'its staple is rough, and occupies more time in the manufacture;' and 'generally comes to market in a slovenly manner, with various qualities mixed together, and badly cleaned.' They say that cordage made of Russia hemp is preferred by the consumer, at an advance of 50 to 100 per cent; that dew-rotted cordage, 'by exposure to the atmosphere, becomes rotten, and after being used a short time cannot be depended on.' A gentleman of experience says, 'before the late war we used some cordage made from Kentucky yarns; many persons did it for the purpose of encouraging American productions; some of them had strong prejudices in its favor; but after a fair trial those persons confessed to me that they must give up the use of it; that it would not wear well, and they could not depend on it.' The same gentleman further observes, 'I would not use cordage made of Kentucky yarns or hemp, even if I could procure it at half the price of cordage made from Russia.'

'Manfacturers and consumers of cordage appear universally to concur in these opinions. Equally decided is their opinion as to the quality of the American plant in its natural state. They all say, that American hemp, pulled in the right season water rotted, and properly handled would make as good cordage as the best Russia. Indeed, it has been forcibly contended that it would be preferable, because Russia hemp is injured from being heated on ship board—an injury to which American hemp, used in the United States, would not be liable.

'While these opinions appear well founded, there is another consideration, which addresses itself immediately and forcibly to the growers of hemp in the United States. The difference between the *product* of given portions of plant, water rotted, and dew rotted, is confidently believed to be greatly in favor of the former mode.

'Experiments have been made by boiling and steaming, to avoid either process of rotting; but the result proved unsatisfactory.

'Pushing their experiments with a perseverance which deserves, and must ultimately secure, success, our countrymen have lately introduced a machine, called, "the flax and hemp dresser," with a view to avoid altogether the process of rotting. The power of this machine to disengage effectually the woody part of the plant from the lint, is spoken of confidently by those who have seen it in operation; but, whether the hemp, thus prepared, will be as serviceable as the water rotted; whether it will not be more liable in bulk, to injury from the gum and mucilage which are wholly left in it; or whether other objections may not exist, are points upon which the commissioners are uninformed. They have, however, engaged a small supply of yarns from hemp thus prepared, and intend to make experiments to test their strength and durability.

'About twelve months since, a gentleman produced a sample of cordage, made it is believed, of American dew rotted hemp with the yarns dipped in pyroligneous acid, and tarred about one eighth as much as yarns usually are, prior to being laid; calculating, that the antiseptic properties of this acid would obviate the injuries sustained in the process of dew rotting, and impart to the cordage a durability equal to that made of water rotted hemp. With a view to an experiment, the Commissioners have engaged enough of these yarns to make a nine inch cable. Although the gentleman speaks very confidently as to the durability of cordage made from these yarns, yet we are unable to discern how the pyroligneous acid can remedy the defects occasioned by dew rotting, and impart to cordage the property of retaining a sufficient portion of tar for its preservation, particularly when used as cables.

'The proceedings of Congress, during their last session, and the opinions then expressed, that American hemp, in its natural state, is equal to Russia, and that the preference given to the latter has arisen essentially from the manner in which it is rotted, have induced some of our most respectable farmers to engage in the cultivation and preparation of hemp, upon the Russian system. The Commissioners have contracted for three tons of American hemp of this description, and directed it to be made into cordage of various kinds, in order to test its comparative strength and durability with the best Russia, on board the ship North Carolina. The result of this experiment, if the American hemp shall have been carefully gathered, at the right season, and properly prepared, will enable the Commissioners to express a satisfactory opinion upon the subject; and they cannot entertain a doubt, that in such case, it will be in their power to say, that the American water rotted hemp is, in all respects, fully equal to the best Russia.

'With regard to "the places where, and the extent to which, hemp may be cultivated," in the United States, it may be unreservedly said, that the climate, throughout the whole country, is no where unfriendly, and that hemp may be cultivated advantageously wherever the soil is adapted to it. It is grown in great perfection in the Eastern, Western, and Southern States, as far South as, and including Virginia. We have not heard of any grown South of Virginia; though, as it is known to succeed well in warm latitudes, there is no doubt it can be cultivated in our most Southern States.'

I have the honor to be, with great respect,
Sir, your most obedient state,
JOHN RODGERS.

Hon. S. L. Southard,
Secretary of the Navy.

Caterpillars.—A gardener at Glasgow, having observed that a piece of woollen cloth which, blown by the wind, had accidentally lodged upon a gooseberry bush, which was soon covered with Caterpillars, took the hint of putting pieces of stuff upon other plants infested with these insects; the caterpillars took refuge upon them during the night, and in this easy way the bushes were soon cleared of them.—*Silliman's Journal of Science.*

Robert Treat Paine, Esq. of this city, has been appointed by Governor Lincoln, under the authority of a Resolve passed at the last session of the Legislature, 'to make a general survey of this Commonwealth, and from such survey and such astronomical observations and calculations, as may be made, to project an accurate skeleton plan of the State, which shall exhibit the external lines thereof, and the most prominent objects within the lines and their locations.

Mr Paine's reputation as a mathematician and astronomer, well warrant the confidence thus reposed in him. We hope that he will accept the appointment and enter upon its duties without delay.—*Palladium.*

To Destroy Rats and Mice.—Mix flour of malt with some butter, and add thereto a drop or two of oil of annisseed; make it up into balls, and bait your traps with it. If you have thousands, by this means you may take them all.

Progress of Steam.—The Glasgow Chronicle mentions that in June next, four steam carriages, with six wheels each, will start between the cities of Glasgow and Edinburgh. The number of passengers that can easily be carried by each vehicle will at least amount to twentythree. The distance will easily be accomplished in three hours.

CULTURE OF HEMP.

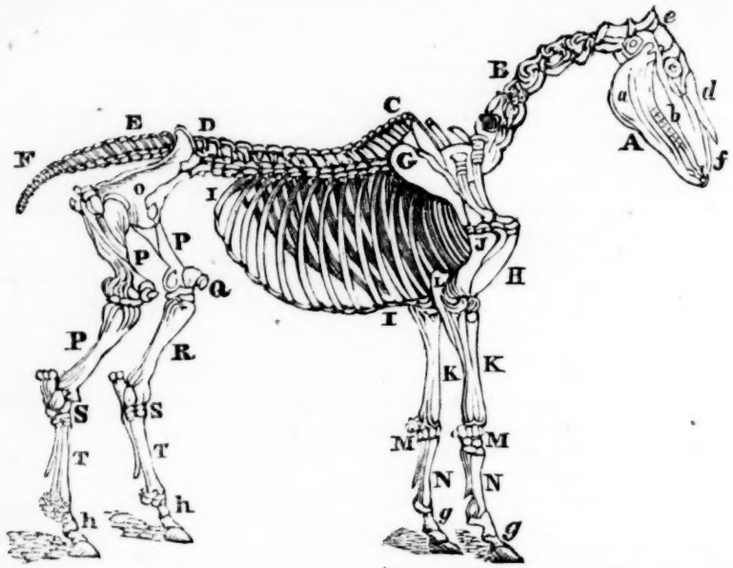
It will be seen by an article in this paper that the Trustees of the Agricultural Society of this County, have offered liberal premiums for the most successful experiments in the cultivation of Hemp the present year. A very decided belief is entertained by some of our most intelligent practical farmers, that this may become an important and a profitable branch of agriculture, more so, indeed, than almost any other in this section of the country. It is, therefore, desirable that the experiment be fairly tried, and we hope that many may be induced to engage in making it, that a comparison may be instituted between our various kinds of soil, in order to ascertain which is best adapted to the purpose. An imperfect experiment may be worse than none, because it may lead to a conclusion the reverse of what a more extensive trial might demonstrate to be a correct and proper one.—*Worcester Spy.*

SOAKING SEED CORN IN COPPERAS WATER.

An experiment was made last season by a gentleman in Dennis of soaking seed corn in a solution of copperas, from 24 to 40 hours previous to planting, as recommended in the New England Farmer, and in Eessenden's New England Farmer's Almanac. The corn thus soaked was untouched by worms, while some planted on the same piece in the common way, was very much injured. A Connecticut farmer has made a similar trial and says that it was not only untouched by worms, but yielded one third more. A pound of copperas dissolved in warm water is to be used to a peck of corn.—*Barnstable Jour.*

Chapter VI.

THE EXTERNAL STRUCTURE OF THE HORSE.



A The Head.
a The posterior maxillary or under jaw.
b The superior maxillary or upper jaw. Opposite to the letter is a foramen hough, which pass the nerves and blood-vessels which chiefly supply the lower part of the face.
c The orbit, or cavity containing the eye.
d The nasal bones, or bones of the nose.
e The suture dividing the parietal bones below, from the occipital bones above.
f The inferior maxillary bone containing the upper incisor teeth.
B The Seven Cervical Vertebræ, or bones of the neck.
C The Eighteen Dorsal Vertebræ, or bones of the back.
D The Six Lumbar Vertebræ, or bones of the loins.
E The five sacral vertebræ or lanes of the haunch.
F The Caudal Vertebræ, or bones of the tail, generally about fifteen.
G The Scapula, or shoulderblade.
H The Sternum or fore-part of the chest.
I The Costæ or ribs, seven or eight articulating with the sternum, and called the *true ribs*, and ten or 11 united together by cartilage, called the *false ribs*.
J The Humerus, or bone of the arm.
K The Radius, or bone of the fore-arm.
L The Ulna, or elbow. The point of the elbow is called the Olecranon.
M The Carpus or knee, consisting of seven bones.
N The metacarpal bones. The larger metacarpal or cannon or shank in front, and the smaller metacarpal or splent bone behind.
g The fore pastern and foot, consisting of the Os Suffraginis, or the upper and large pastern bone, with the sessamoid bones behind, articulating with the cannon and greater pastern; the Os Coronæ, or lesser pastern; the Os Pedis or Coffin bone; and the Os Naviculare: or navicular, or shuttle-bone, not seen and articulating with the smaller pastern and coffin bones.
h The corresponding bones of the hind feet.
O The Haunch, consisting of three portions, the Ilium the Ischium, and the Pubis.
P The Femur, or thigh.
Q The stifle joint with the Patella.
R The Tibia or proper leg bone—behind is a small bone called the fibula.
S The Tarsus or hock, composed of six bones. The prominent part is the Oscalcis, or point of the hock.
T The Matatarsals of the hind leg.

Beautiful as is the horse, and identified so much with our pleasure and our profit, he has been the object of almost universal regard; and there are few persons who do not pretend to be somewhat competent judges of his form, qualities and worth. From the nobleman with his numerous and valuable stud, to the meanest helper in the stable, and not excluding even the mechanic who scarcely crosses, or sits behind a horse once in a twelvemonth, there is scarcely a man who would not be offended if he were thought altogether ignorant of horse flesh. There is no subject on which he is so positive, there is no subject on which, generally speaking, he is so deficient, and there are few horses, on some points of which these pretended and self-sufficient judges would not give a totally opposite opinion.

The truth is, that this supposed knowledge is rarely founded on principle—or is the result of the slightest acquaintance with the actual structure of this animal, or that form and connexion of parts on which strength, or fleetness, or stoutness, must necessarily depend. If we were constructing or examining a machine composed of levers and pullies, and by which we purposed to raise a great weight, or to set in motion certain bodies with a given velocity, we should fail in our object, or expose our ignorance of the matter, if we were not aware what kind of lever or connexion of levers was necessary, and in what situation the ropes should be placed, and in what direction the force should be applied, and by what means we could obtain mechanical advantage, and by what peculiar construction it would inevitably be lost.

Now the structure of the horse, like that of the human being,* consists of numerous levers in the shape of bones, with ropes attached to them in the form of muscles and tendons; and these levers are differently connected, and act in different directions; and he will be the best judge of horses who, while he has loved, and lived among them, is somewhat acquainted with the circumstances in which mechanical power is gained or lost.

In speaking then of the structure of this animal and the points which guide the opinion of real judges of him, we shall, as briefly and as simply as we are able, explain those fundamental principles on which his usefulness and beauty must depend We require one kind of horse for slow and heavy draught, and another for lighter and quick work; one as a pleasant and safe roadster; another with more speed and equal continuance as a hunter; and another still is wanted for the race course. What is the peculiarity of structure—what are the particular points that will fit each for his proper business, and to a certain degree, unfit him for everything else? The farmer will require a horse of *all work*, that can carry him to market and take him round his farm, on which he can occasionally ride for pleasure, and which he must sometimes degrade to the dung cart or the harrow. What combination of powers will enable the animal to discharge most of these duties well, and all of them to a certain extent profitably.

Much time spent among horses, an acquired love of them, and a little, sometimes possibly, too dearly bought experience, may give the agriculturist some insight into these matters. We will try whether we cannot assist him in this affair; whether we cannot explain to him the reason why certain points must be good, and why a horse without them must, of necessity, be good for nothing. Perhaps some useful rules may thus be more deeply impressed upon his memory, or some common, but dangerous prejudices may be discarded, and a considerable degree of error, disappointment and expense avoided.

* See Treatise '*Animal Mechanics*.'

HEMP.

The Trustees of the Worcester County Agricultural Society, for the encouragement of the cultivation of Hemp within this county, and for the purpose of ascertaining by actual experiment whether the crop is, as it is represented, more profitable to the farmer than any grain or hoed crop usually raised in this vicinity, have been induced to offer the following premiums:

For the greatest quantity of clean dressed Hemp, the product of at least one acre of land, in one field, $20

For the next greatest quantity of clean dressed Hemp, the product of one acre of land, at least in the field, $10

To entitle himself to either of the above premiums, the person who intends to become a competitor, must give notice thereof to the Recording Secretary on or before the 15th day of July next that a Committee of the Trustees may view the crop on the ground if they should deem it expedient, and the said claimant must also exhibit a specimen of said dressed Hemp to a Committee of said Society on the first day of December next, accompanied by a statement in writing, under oath, of himself and one other person, of the following particulars. 1. The state and quality of the land in the spring of 1830. 2. The product and general state of cultivation, and quantity and quality of manure used on it the past year. 3. The quantity of manure (if any) used on it the present year. 4. The quantity of seed used, and the time and manner of sowing. 5. The time and manner of harvesting, the amount of the product, ascertained by actual weighing after the Hemp is dressed, and a detailed account of the entire expense and process of cultivation and curing of said crop; the statement to be accompanied by a certificate of the measurement of the land by some sworn surveyor; and a certificate from some disinterested person who saw the Hemp weighed, of the fact, and that the whole of

the dressed Hemp from the said acre is of equally good quality with the samples exhibited for premium.

The above Premiums will be declared as soon after the first day of December next as may conveniently be done.

By order of the Trustees.

WILLIAM D. WHEELER,
Recording Secretary.

HORSES.

The following remarks on the treatment of horses, (says the N. Gazette,) by Mr Carver, are worthy the attention of those who properly appreciate these noble and serviceable animals.

From the N. Y. Enquirer.

A great number of fine horses are destroyed in this country by those who have them placed under their care. It is a custom to wash the horses with cold water, sometimes after hard driving, in the hottest time of the year, by which practice I have known many of them take the lockjaw and die; others have been foundered by only washing their legs and feet; it stops all perspiration and produces violent fevers. No gentleman in England will permit his horse to be washed; the horse is not a water animal; he wants the particular fostering hand of care, when placed in a domestic state.

Another bad practice prevails: the grain is thrown into the manger without sifting, and sand or gravel being heavier than the grain, it will settle down on the stomach of the horse. A few years past I brought a stone from a horse which was believed to have been formed by thus feeding; it was as large as a goose's egg, and cased round like a cocoa nut shell.

All stables should be well ventilated, so as to admit a constant circulation of fresh air, without which horses are continually breathing on their lungs foul, putrid matter. No stall should be less than five feet wide, as the horse, like man, wants to stretch himself when lying down to rest; many horses have died in the night, by being confined in narrow stalls, and being tied with a rope round the necks. All horses should have head stall halters, with a rein on each side, that should run up and down with blocks, in pulleys, on each side of the stall. The mangers should draw in and out like a drawer in a bureau, or desk; by being thus fixed as I have described, the horse will rise with ease, but on the old plan, the horse, by struggling to rise, often gets his head under the manger and is often found dead in the morning. The hayracks should be placed in front of the stalls, and not on the side.

Few men have had the opportunity to observe the evils that have occurred by the bad management of horses, and very few have doctored so many as myself, having some knowledge of the structure and economy of the horse, after 50 years' extensive practice. W. CARVER.

N. B. I could have said a great deal more on this subject, but the work that I wrote, entitled 'The Practical Horse Farrier,' will shortly be published, being the fourth edition, in which the subject will be treated on more largely.

From the Middletown Sentinel.

AGRICULTURE.

While so large a part of community are following extravagance in dress, splendid equipage, public places of excitement, gambling, swindling, buying tickets, trying to get rid of paying their debts, and wishing to live by their wits, or on the labor of others, without rewarding them, and pretending to be something in the world; and so many people being inclined to read very superficially, I am sensible that it is best to be very short on this subject, or it will be passed over by a great part of the farmers, without reading at all.

When so many are either cutting down their orchards, or neglecting them as worthless, because they say the cider will not more than pay for making. I would advise them to preserve and take care of their trees, and if they have not pruned them yet, this year, it is better to do it now than to let the young shoots grow up into a swamp, so that a person cannot climb into a tree to pick the fruit; for the best use we can make of apples is to eat them, or use them for culinary purposes as far as can be done to advantage; and in order that they may keep well, they should be picked by hand; and a tree which bears winter fruit, should be so trimmed, that a man may go round the inside and pick the fruit, though it may be gathered from the outside limbs by the use of a ladder.

We may have apples three fourths of the year, by taking care to have some early fruit, and plenty of that which will keep until May and June; and it is better for a man to take an apple at 11 o'clock, than a drink of grog; for there is some nourishment in an apple, and it quenches thirst much better than spirituous liquor, which has no quality of nourishment, and only serves to make a person hungry and dry, with loss of money, health and reputation.

You should not distil your cider into brandy at all; but make it good, and it will sell in New York, Boston, or some other market, or make vinegar; or if you have plenty of apples, you may let your cattle and hogs eat part of them; they are not apt to get choked where they can have free access, or where a creature is fed by itself.

If a beast should get choked, put pork rind round the end of a stick, and the obstruction will push down easily, and you may use the same where an ox is hoven; though it is about as well to plunge a knife into the paunch, on the left side between the hip bone and the hind rib.

Farmers should save all their pomace and feed it to their stock; it is even good for cows which give milk, by feeding them with it sparingly a few times at first. I tried it 45 years ago, by keeping one cow with pomace principally for three months, and two others on good pasture, rowen or hay; and the pomace cow did as well as either. I published this experiment several times in the papers, yet great heaps of stinking pomace are seen in many parts of Connecticut every year. If cows eat their fill of apples or pomace, it will at first make them stagger, and they will give much less milk; or if a cow gets to a heap of thrashed grain, it is still worse; but we do not throw the grain into heaps, and let it rot on that account.

Farmers have small profits these hard times, but not smaller on orcharding than on other things. It is not uncommon for a farmer's crop to fall short of paying for the labor of raising it, and sometimes a crop is destroyed entirely—yet if a farmer is industrious and prudent, he may generally add a little to his property: It is better than to slide down hill on lottery tickets.

A FARMER.

NEW ENGLAND FARMER.

BOSTON, FRIDAY, MAY 28, 1830.

SWINE.

A friend of the Editor states a case of a sow devouring her offspring, and inquires what should be done in such an occurrence. The fifth volume of the New England Farmer, page 214, contains an extract of a letter from a cultivator in Gilsum, N. H. to the editor, stating an incident of that kind. The sow, which was of the Bedford breed, and procured of Dr FISKE, of Worcester, and one of the finest, which the writer had ever seen, for shape and propensity to fatten, not only refused to own her young, but 'attacked them with the ferocity of a tigress.' Dr FISKE's opinion was requested relative to the cause and cure of of this strange propensity. In reply the doctor observed:

'It is not uncommon for sows to destroy their first offspring. It is more rare at a later period. In most cases where I have inquired into the fact, whether in old or young breeders, I have ascertained that they had been disturbed in some of their essential habits, either from being removed from their companions, their range restricted, or from being removed from one pen to another. All these changes, however, may be effected with safety, by allowing them sufficient time to become accustomed to them, four or five weeks at least. I have known sows do well with a second litter after having destroyed a first, under one of the above mentioned excitements. Hence it would be unwise to condemn to death one which bids fair otherwise to be a valuable breeder, even for this most unnatural crime, could it be traced to a palliative cause.

* * * * * *

'The peculiar ferocity of these animals manifested on these occasions, may be increased if not wholly caused by *hysteric irritability*. Should this be the fact, it does not follow that a *second yeaning* would cause a similar excitement. This opinion is inferred from analogy, rather than known from any demonstration; as a repetition is not to be presumed, where a first experiment has proved so discouraging. I should not hesitate to risk the trial under a like commencement, if the animal in all other respects was of the first character and not easily replaced. If I succeeded I should gain also in *quality*, as the young of all animals improve by succession.

'It is of great importance that swine of all descriptions, particularly those intended for breeding, should be rendered perfectly tame and gentle, that their enclosures may be entered at all times without giving alarm or exciting their resentment. This is easily done by gentle treatment and early accustoming them to the brush or curry comb. No animal enjoys it more, or derives from it greater benefit. While it increases their comfort, it adds to their health and growth, and serves in a great measure to correct their tempers and dispositions.

'While on this subject, I take occasion to state a fact of which farmers seem not sufficiently aware, which forcibly illustrates the importance of keeping their swine warmly housed in all inclement seasons. Late in autumn I put two shoats, which I had selected for breeders, into a warm inclosure in my barn; their size and other qualities were of an average with the rest which re-

mained exposed to the weather, except when they returned to their nest. There is at least a third difference in weight in favor of those which are housed, their keeping having been the same.'

MILDEW ON GRAPES.

At the request of several subscribers, we republish from the New England Farmer of last July, the substance of Mr PRINCE's remedy against the mildew in Grapes:

'Take a pint and a half of sulphur, and a lump of the best unslacked lime of the size of the fist, put these in a vessel of about seven gallons measurement, let the sulphur be thrown in first, and the lime over it, then pour in a pail of boiling water, stir it well, and let it stand half an hour, then fill the vessel with cold water, and after stirring well again, allow the whole to settle—after it has become settled dip out the clear liquid into a barrel, and fill the barrel with cold water, and it is then fit for use. You next proceed with a syringe holding about a pint and a half, and throw the liquid with it on the vines in every direction, so as completely to cover foliage, fruit and wood; this should be particularly done when the fruit is just forming, and about one third the size of a pea, and may be continued twice or thrice a week for two or three weeks; the whole process for one or two hundred grape vines need not exceed half an hour.'

☞The great sale of Colonel POWEL's stock will take place at Powelton, near Philadelphia, on Wednesday, the 16th of June, instead of the 10th, as stated in the last New England Farmer. In alluding to this sale, the Editor of the American Farmer remarks, 'the public will have an opportunity, such as was never before presented in America, of procuring improved Short Horn Cattle of the highest blood, and the most perfect form.

'From the care taken by Colonel Powel, without regard to trouble or expense, to get stock of the purest blood, and from established strains of good milkers, we feel confident that there is not in England a herd of cattle superior to those of Powelton. All have been kept pure, though judiciously crossed between different families of the same blood. All may be clearly traced to the most distinguished of their respective families in the English Stud-Book. The demand for these cattle has steadily increased for a series of years, and the sales of male calves at Powelton for some years have equalled from three to four thousand dollars per annum. Colonel Powel has, in most cases, refused to sell the females.'

At the exhibition of the Massachusetts Horticultural Society, on Saturday last, Mr Pettee, of Newton, exhibited Wilmot's Superb Strawberries, measuring $2\frac{3}{4}$ inches in circumference.

RAISING APPLE TREES FROM CUTTINGS.

MR FESSENDEN—The following paragraph I have copied from an English Journal. I should be glad to know if the experiment has ever been successfully tried in the United States:

'A horticulturist in Bohemia has a beautiful plantation of the best sort of apple trees which have neither sprung from seeds nor grafting. His plan is to take shoots from the choicest sorts, insert them into a potato, and plunge both into the ground, leaving but an inch or two of the shoots above the surface. The potato nourishes the shoot whilst it pushes out roots, and the shoots gradually spring up and become a beautiful tree, bearing the best of fruit without requiring to be grafted.'

SILK CULTURE.

We have seen several thousand Silk worms at the Tremont House, where is a very interesting exhibition of silk in its different stages of preparation. We understand that the proprietor J. H. COBB, Esq. of Dedham, intends to have the exhibition open at all hours in the day for showing the wonderful operation of these valuable insects. In order that a knowledge of the business may be made as extensive as possible he informed us that he had fixed the price of admission at $12\frac{1}{2}$ cents; children half price.

From the Greenfield Gazette.

CATTLE SHOW AT NORTHAMPTON.

SILK AND HEMP.

The anniversary of the Hampshire, Franklin and Hampden Agricultural Society, will be commemorated at Northampton, on Wednesday, October 27. In addition to the usual premiums, the Society this year offer premiums on hemp and mulberry trees. The premiums we copy below. We are glad these subjects have attracted the attention of the Society, and hope their liberality will induce some of our citizens to direct a portion of their care and labor upon these articles of culture. The produce of the farms of this country can hardly be said to be of such kind and quality, as, in the present depressed state of the markets and where the price of labor is comparatively so high, to yield a fair profit to the cultivator. Our people cannot compete with those of N. Y. and other states, in the articles of bread stuffs; for the facility of transportation possessed by them and wanted by us, give them a decided advantage over us; and besides, wheat, the most important of those articles is generally on our lands much lighter than on the rich and new lands of the south and west. If our farmers would become, we will not say rich, but possessed of a sufficient competency to secure them in their old age from the unhappiness and distress attendant upon pecuniary embarrassments, or the necessity of unremiting labor to procure a bare sustenance, it is obvious that they, or those of them who are not now independent, must devise some means of earning money more productive than the cultivation upon their lands of the usual profitless crops. In this season of distress, the attention of the public has been called to several articles never raised in this region until recently, or raised to a very limited extent. Among them are Hemp and Silk. The most eminent practical agriculturists of our country concur in representing the Hemp crop as vastly more profitable than any of the common crops, and their opinions are not formed from speculations based upon fancied positions, but they are founded on the certain results of experience. The testimony of Samuel Lathrop, and Judge Buel, is alone sufficient to convince the rational mind of the superior productiveness of this crop over others. Long established habits, we know, whether of body or miud, are of difficult eradication; and as Hemp has not formerly been raised in these parts, many will, doubtingly, shake their heads, and exclaim 'I don't know about this ere hemp business; we can't raise it so as to be any object;—at any rate I'll stick to the old crops and let others try the Hemp, and see whether they burn their fingers with it or not.' But we hope there are others whose intelligence will enable them to rise above the operations of prejudice engendered by the force of habit, who will step forward and repeat the experiments which have been made by others. We cannot think otherwise than that they will gain a reward for which they might have striven in vain with other articles of produce.

The culture of silk, which has, within a few years been urgently pressed upon the attention of the American public, might be made another source of profit to the grower. It requires, after the planting and growth of the mulberry orchard, the attention of females and children only, and therefore may be produced without at all interfering with other operations upon the farm. The income from this source, is therefore clear profit. True, we have not the skill, nor the machinery, to reel the silk from the cocoons, properly; but though it be not prepared in the most proper manner, there is, and always will be a ready market for as much as will be produced.

The domestic demand for silk is already considerable, and will increase as the production of the silk increases. One fringe-maker in Philadelphia, consumes $20,000 worth annually. As soon as the culture of this material shall receive the attention its importance deserves, filatures to reel the silk from the cocoons will undoubtedly be established, when a new impulse will be given to the demand, as American raw silk will then be used in the manufacture of the finest silk fabrics, for which it cannot now be employed on account of the imperfect manner of reeling it. It would then find a ready market in foreign parts, if not receive the decided preference of the manufacturers. We are fully persuaded that, with proper attention to this subject, silk would become to the United States, a staple article of production and exportation. There is nothing in the world to prevent it. It is a source of wealth and independence within our reach, and if we strive for it with one half the energy and perseverance with which other things, and many of them mere shadows, are pursued, we shall not fail to secure it. Let the people become acquainted with the subject, and we feel persuaded they will not neglect it as useless and unprofitable. When a single town can be cited which like Mansfield, produces silk to the value of $25,000 yearly, men of other towns should inquire if they cannot improve their condition by the same means. That sum would add materially too the prosperity of any country town, and it is not to much to say any town may receive it if labor be directed into the proper channel.

If the Hampshire, Franklin and Hampden Agricultural Society, by the offer of their premiums shall accelerate the introduction of the growth of silk in this region, they will do a service worth more than all the rest they have ever done. And this we say in the full conviction that their efforts have been of incalculable advantage to the three counties. Whatever may be the result, the Society deserves the thanks of the community for attracting notice to the subject with golden charms. The following are their premiums on the Mulberry—together with the introductory remarks.

WHITE MULBERRY ORCHARD.

The following premiums are offered for the encouragement of raising the White Mulberry. Premiums, in some shape, will be offered from year to year, to encourage the culture of the mulberry and manufacture of silk. There are large quantities of land within the limits of the Society well

calculated for mulberry orchards. Excepting the first raising and planting the mulberry trees, all the work can be performed by women, children, and aged people, and silk may be made a staple of our country. Our soil and climate are congenial to the flourishing growth of the mulberry, and the silk worms will thrive in New England, under proper management, as well as they do in most parts of Europe, where the raising of silk is the vital sinew of the community. The mulberry tree will flourish on soil of an inferior quality, and is well calculated for hedges.

For the largest and best plantation of the white mulberry over one acre, and not less than 2000 plants		$20 00
Next best do not less then one acre, and 1000 plants		15 00
do do do	3-4 acre, ' '	10 00
do do do	1-2 acre, ' '	6 00
do do do	1-4 acre, ' '	5 00
do do do	1-8 acre, ' '	4-00

No premium can be awarded more than once upon the same mulberry orchard.

That our enterprising citizens may have time to sow and transplant the mulberry, claims for premiums on mulberry orchards must be entered on or before the first of July 1831.

The following on Hemp:—

For the encouragement of the culture of Hemp within the limits of the Society, the Committee are induced to offer the following premiums, from a full conviction that a Hemp crop will be more productive to the farmer than corn or almost any other crop he can take from his land.

For the greatest quantity of clean, dressed Hemp, being the product of one acre of land, dressed in the usual mode or by the Hemp machine, - - - -	$7 00
Second do - - - -	5 00
Third do - - - -	4 00
Fourth do - - - -	3 00

Believing that a much greater quantity of clean, dressed Hemp can be obtained by the use of the improved *Hemp Machine*, than by the usual mode with the brake and knife, the premiums for clean dressed hemp will not be declared until October, 1830, that the farmer may have opportunity to test the utility of the machine with or without water rotting.

Claims for the above premiums must be entered with D. Stebbins, post-paid, on or before the first day of Oct. 1830. It will be expected that a detailed account of the mode of cultivation, description of the soil, quantity of manure used, quantity of seed sowed, mode of preparing the land, and method of securing the crop, should be exhibited in writing; the quantity of Hemp certified by disinterested individuals who saw the weight, and that the whole dressed hemp is of an equal good quality with the samples exhibited and deposited with the Secretary for the inspection of the committee.

EXHIBITION OF FLOWERS, &c, May 22, 1830.

MASSACHUSETTS HORTICULTURAL SOCIETY.

Iris Florentina, Iris Germanica, Senecio elegans, or double flowering Elegant Grounsel, Veronica gentianoides and tulips from J. WINSHIP.

Violas Narcissus and Cowslips from S. DOWNER; Iris Florentina and Convallaria Multiflora or Solomon's Seal, from Mr GIBBS; a fine specimen of Tea Rose from A. ASPINWALL. Bouvardia triphilla from D. HAGGERSTON.

Trientalis Americana, Cypripedium Acaulis, Arum Triphyllium, Cornus Canadensis, Pyrus Obovatus, Native Plants, from the vicinity of Cambridge, by J. L. RUSSELL.

Mr OTIS PETTEE, of Newton, exhibited a few of Wilmot's Superb Strawberries, which grew in a bed of soil, in a green house, six feet from the Glass, they were picked too soon, not having attained taste and flavor.

Tulips were shown for Premiums by the following gentlemen, A. ASPINWALL, S. DOWNER, D. HAGGERSTON.

The show of Tulips was very fine. It was decided by the Committee that A. ASPINWALL had the finest flowers. The exhibition was very gratifying, and was visited by many ladies, as well as gentlemen.

Turnip Seed, &c.

For sale at the Seed Store connected with the New England Farmer Office, 52, North Market-street,

An extensive assortment of Turnip Seeds, of the most valuable sorts for family use or stock. The most approved kinds for the farmer, are the White Dutch, White Stone, Yellow Stone and Yellow Malta. The two latter are of uncommon excellence, and keep well. Loudon describes the Yellow Malta as 'an excellent and beautiful root,' and of delicious flavor. Of the sorts for field culture, the White Norfolk, Yellow Aberdeen, White Flat, and Ruta Baga, are the best. The Yellow Aberdeen is most approved among the Farmers of England and Scotland, as it grows to a large size, is very sweet and nutritious, and keeps till June. The above seeds were saved in Europe expressly for this Establishment, and the utmost dependence may be placed on their genuine quality.

Also, a variety of Long and Turnip rooted Radishes, suitable for sowing the ensuing months, Long Prickly, and many other varieties of Cucumbers for pickling.

May 28.

Sportsman.

The full blooded horse Sportsman will stand at B. Tafts stable in Brighton, on Mondays and Tuesdays, until noon; at Brigham's in Westborough on Wednesdays; at Estabrooks' in Shrewsbury, on Thursday; and at Stockwell's in Worcester, on Fridays and Saturdays, until 2 o'clock of each week through the season.

May 28.

Pomological Magazine.

LOST,—the 23d number of the London Pomological Magazine, for September, 1829. Whoever has borrowed it, is requested to return it to Mr ROBERT MANNING, at Salem, or to the office of the New England Farmer.

May 28. 3t.

Massachusetts Horticultural Society.

A stated meeting of the Society will be held at their Hall, on Saturday, June 5th, at 11 o'clock, A. M.

ROBERT L. EMMONS,
Recording Secretary.

May 28.

Lost.

On the 27th of March last, a package of Books, consisting of Loudon's Encyclopedia of Plants, and Loudon's Gardeners' Magazine, was left at the New Bedford Wagon Office, in Boston, directed to BENJAMIN RODMAN, Esq. New Bedford, which has never been received. Whoever will give any information respecting it to Mr RODMAN, at New Bedford, or to Mr RUSSELL, at the New England Farmer Office, Boston, shall be suitably rewarded. May 28. tf.

Agricultural Implements.

For sale at the Agricultural Warehouse 52 North Market-street,

Pickering's improved Tree Brushes, for destroying Caterpillars; long and short handled brushes, for washing trees; Vegetable Brushes; Brushes for tarring trees; Horse Brushes &c.

Willis' improved Brass, Copper, and Tin Syringes, for cleansing grape vines and preventing mildew, see N. England Farmer vol. 8, p. 5, a communication from William Prince, Esq.

Lactometers; a few well finished Lactometers, some with extra large size glasses.

Pruning Knives, Shears, &c.; Wakefield's Improved Pruning Shears, Fruit Shears, Garden, Grass, and Hedge Shears-Pruning Saws, Chissels, &c.

Pruning and Budding Knives; a few very superior Ivory handled Budding and Propagating Knives. may 21.

Glass, Cheap.

40 Boxes 6 by 7 Window Glass, suitable for Green Houses or Hot-beds, with an extensive assortment of all other sizes, for sale by Loring & Kupfer, No. 10, Merchants' Row. 3m March 12

Powder at 2s per lb.

DUPONT'S POWDER, quality warranted, for sale at *Copeland's Ammunition Store*, 65 Broad st, at *retail*. Also SHOT, CAPS, &c. of the *best quality*—cheap for cash.

PRICES OF COUNTRY PRODUCE.

			FROM	TO
APPLES, best,		barrel.	2 25	3 00
ASHES, pot, first sort,		ton.	102 00	108 00
Pearl, first sort,		"	120 00	130 00
BEANS, white,		bushel.	87	1 12
BEEF, mess,		barrel.		9 00
Cargo, No. 1,		"	7 25	7 50
Cargo, No. 2,		"	6 25	6 50
BUTTER, inspected, No. 1, new,		pound.	10	13
CHEESE, new milk,		"	6	8
Skimmed milk,		"	2	3
FLOUR, Baltimore, Howard-street,		barrel.	5 12	5 12
Genesee,		"	5 12	5 25
Rye, best,		"	3 62	3 87
GRAIN, Corn,		bushel.	53	55
Rye,		"	65	67
Barley,		"		67
Oats,		"	35	40
HOG'S LARD, first sort, new,		cwt.	8 00	8 50
HOPS, 1st quality.		"	14	15
LIME,		cask.	85	90
PLAISTER PARIS retails at		ton.	3 75	4 00
PORK, clear,		barrel.	16 00	17 00
Navy, mess,		"	12 25	12 75
Cargo, No. 1,		"		12 50
SEEDS, Herd's Grass,		bushel.	1 75	
Orchard Grass,		"		3 00
Fowl Meadow,		"		4 00
Tall Meadow Oats Grass,		"		3 00
Red Top (*northern,*)		"	62	75
Lucerne,		pound.	38	50
White Honeysuckle Clover,		"		33
Red Clover, (northern)		"	7	8
French Sugar Beet,		"		1 50
WOOL, Merino, full blood, washed,		"	40	50
Merino, full blood, unwashed,		"	20	30
Merino, three fourths washed,		"	35	40
Merino, half blood,		"	33	35
Merino, quarter washed,		"	30	33
Native, washed,		"	36	40
Pulled, Lamb's, first sort,		"	40	45
Pulled, Lamb's, second sort,		"	30	35
Pulled, " spinning, first sort,		"	33	35

PROVISION MARKET.

CORRECTED EVERY WEEK BY MR HAYWARD,

(Clerk of Faneuil-hall Market.)

BEEF, best pieces,	pound.	8	10
PORK, fresh, best pieces,	"	8	10
whole hogs,	"	5	6
VEAL,	"	3	7
MUTTON	"	4	12
POULTRY.	"	10	16
BUTTER, keg and tub,	"	12	14
Lump, best,	"	15	18
EGGS,	dozen.	10	11
MEAL, Rye, retail,	bushel.		85
Indian, retail,	"		80
POTATOS,	"	20	25
CIDER, [according to quality,]	barrel.	3 50	4 00

BRIGHTON MARKET—*Monday, May 24.*

(Reported for the Chronicle and Patriot)

At market this day, 192 Beef Cattle, including 11 unsold last week, unsold, 9, 14 pair Working Oxen, 18 Cows and Calves, 129 Sheep and Lambs, 49 Swine, the remainder of the lot we reported last week.

PRICES.—*Beef Cattle*, extra, at $5 33 a 5 50; good $5 a 5 25; thinner $4 25 a 5 00; a small advance from last week, (say 17 c. per 100 lbs.) which makes the price average about the same as it has for four or five Mondays past, except last Monday. *Working Oxen*—Several sales, prices not ascertained. *Cows and Calves*—We noticed the sales of a number at $23, 24 50, 25 00, two at $27, and three at $30. *Sheep*—One lot of about 40 (sheared) were taken at $3, another of about 20 at $5, and another of 45, nearly all of which were *Lambs*, and the first we have noticed this season, $2 25. *Swine*—At retail, 6 a 6½ cents—one lot of 32 to close, at 5½ cents—a few would find a ready market.

Strawberries and green peas, raised by Mr Seth Frost, West Cambridge were for sale at Mr Tombs' stall, Faneuil Hall Market, on Saturday. We did not hear the price.

At Philadelphia, 19th, strawberries from Maryland were selling at 50 cts. per quart, and green peas, 20th, at $1 per bushel. In Baltimore 19th, the former were sold for 12½ cts per quart, and the latter at 50 cts. per bushel. Fresh Salmon, from the Kennebec, were sold in New York, 21st inst. at 50 cts. per lb

MISCELLANIES.

EXERCISE.

Throughout all nature, want of motion indicates weakness, corruption, inanimation, and death. Trenck, in his damp prison, leaped about like a lion, in his fetters of seventy pounds' weight, in order to preserve his health; and an illustrious physician observes, 'I know not which is most necessary to the support of the human frame, *food*, or *motion*.' Were the exercise of the body attended to in a corresponding degree with that of the mind, men of great learning would be more healthy and vigorous—of more general talents—of ampler practical knowledge—more happy in their domestic lives—more enterprising, and more attached to their duties as men. In fine, it may with much propriety be said, that the highest refinement of the mind, without improvement of the body, can never present anything more than half a human being.—*Journal of Health.*

HARD TIMES.

It is a fact that *nine* tenths of the young men of the present day, by some means have come to the conclusion, that it is degrading to till the soil, or to perform any sort of manual labor for a livelihood; they seem to entertain the idea that they are all born to literature, that they possess intuitively the skill of the Lawyer, the Physician, the Clergyman, the Merchant, or the Author; that they have nothing to do but to hie themselves to New York, Boston, or some other city, as soon as they are fairly fledged, and can be trusted out of the reach of their mother's apron-strings, and that their *superlative* talents will at once bring them into notice. With these views, many a young man who might have made a most excellent farmer or mechanic, leaves his home, is gone two or three years, expends perhaps, half his kind father's fortune, which he has labored hard to amass, and returns a poor, lazy, idle blockhead, complaining of 'hard times.' This is the case often, very often. If all those young men who have been born and bred to that most honorable of all employments, tillers of the soil, would attend to that business, instead of gadding off, and attempting to become contemptible coxcombs, we should seldom hear of 'hard times.' —*New Hampshire Spectator.*

FARMING.

The following hints from Flint's Western Review, contain a portion of that practical good sense which must commend itself to the judgment of every enlightened mind, that seeks the highest welfare of the country.

If one half the zeal, energy, and expense, that blot so many gazettes with coarse and low abuse, setting the community by the ears for the sole gain and the paltry purposes of a few demagogues and office seekers, were bestowed on the advancement of agriculture; if the people were half as ambitious to improve and beautify their fields, as they are to settle the nation; and half as angry with thistles, thorns, and poor fences, as they are with their political opponents, who probably wish as well to the country as themselves, we should have more productive fields, less complaints of poverty, more ability to be charitable and munificent, and abundantly more good feeling. From Pittsburg to New Orleans, the son ploughs as his father did before him, and the great mass of farmers are as stationary in their theory as they are in practice. Nine in ten of them believe, at this moment, that book farming is the mere useless, visionary dreaming of men that know nothing about practical agriculture.

We would tell them that England is the garden of Europe, simply because almost every acre of the ground is cultivated *scientifically*, and on principles which have been brought to the test of the most *rigid experiment*. We would tell them that New England, of whose soil and climate they are accustomed to think, as consigned by Providence to sterility and inclemency, is the garden of the United States, only because the industrious and calculating people do not throw away their efforts in the exertion of mere brute strength—but bring mind, and plan, and system, and experience, to bear upon their naturally hard and thankless soil. On every side the passing traveller sees verdure, and grass, and orchards, in the small and frequent enclosures of imperishable rocks; and remarks fertility won from the opposition of the elements and nature. After an absence of ten years, on our return to that country, we were struck with this proud and noble triumph, conspicuous over the whole region.

The real benefactors of mankind, as St Pierre so beautifully said, are those, who cause two blades of wheat to mature where one did before. The fields ought to be the morning and evening theme of Americans, who love their country. To fertilize and improve his farm, ought to be the prime temporal object of every owner of the substantial soil. All national aggrandizement, power, and wealth, may be traced to agriculture, as its ultimate source. Commerce and manufactures are only subordinate results of this main spring. We consider agriculture as every way subsidiary not only to abundance, industry, comfort, and health, but to good morals, and ultimately even to religion. We shall always say and sing, 'Speed the plough.' We shall always regard the American farmer stripped to his employment, and tilling his grounds, as belonging to the first order of noblemen among us. We shall always wish him bountiful harvests, good beer, and moderate use of cider, and if he will rear it himself, of the grape, but none of the pernicious gladness of whiskey; and we shall invoke upon his labors the blessing of God, and say to him 'peace be within thy walls.'

MARCH OF INTELLECT.

A beggar with an instrument as offensive to the ear as were the bagpipes to immortal Shakspeare, commenced his grinding exactly beneath the window of a house in London, where a dinner party had just sat down to dinner. Disgusted with the horrible discord they sent a few half pence to the vagrant with a hint that 'he might go on.' The answer was exquisite—'I never goes on under sixpence!'—For this brilliant witticism the beggar had a shilling.

One of our party, (says Cowper in his four years in Southern Africa, when relating a conversation with a young Caffre,) was attempting to explain to him that the moon shining above us was a world like that on which we stood; and he listened attentively, and calmly observed when the speaker had ceased—'I will not say that what you have told me is not so, but has any one been up to see it?'

'That are' Mattress.—A New York upholsterer stuffs his mattresses with air. They are very pretty, very soft, and very elastic. A young man who was determined to be very comfortable, purchased the article, and slept three nights very sweetly upon it. The fourth night he thoughtlessly thrust a pin into the bed, and with a gentle humming in the ear, soft as the murmur of a wind harp, fell soundly asleep. In the morning he awoke stiff and sore to the bone, and found himself separated from the bed cord by only two thicknesses of oil canvas and the sheet. We have not learned whether he blew up his mattress or burned it.—*New Haven Adv.*

Hard Cider.—'Why, dear me, Mr Longswallow,' said a good lady, 'how can you drink down a whole quart of that there hard cider at a single draught?' As soon as the man could breathe again, he replied, 'I beg pardon, madam, but upon my soul it was so hard *I couldn't bite it off.*'

The celebrated Bishop Berkley used to call the few who had drank spirituous liquors with comparative impunity for several years—*the devil's decoys.*

The spring being the season of the year at which the prejudices and mistakes of a great number of persons induce them to resort to bleeding, or to some active medicine with the view of increasing their health and guarding against disease, it may be proper now, to warn all such against the prejudicial tendency of this practice. It is indeed far more apt to invite an attack of disease than to guard against it. All the purposes for which it is resorted to, can, however, be very certainly answered by gentle daily exercise, great caution in adapting the dress to the rapid changes in the weather, and the strictest temperance.—*Jour. of Health.*

DAVID GRIFFITH, *Seedsman*,
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Would inform the public, that he is now ready to attend to the business of packing up Forest Trees, in crates or matted of any size they may direct, and on the shortest notice, for any part of the United States; the best attention paid to the packing and having the roots well covered.

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French & Emmons, No. 31, South Market-St. have just received a supply of J. & A. Fales' Patent Hoes.—Fire Brick and Slabs for furnaces constantly for sale.
April 2. 2m

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